34. (Amended) The program storage device as claimed in Claim 33, wherein said step of obtaining data includes obtaining biometric information data of said two or more persons.

35. (Amended) The program storage device as claimed in Claim 30, wherein said step of obtaining data further includes obtaining data relating to behavioral characteristics of said two or more persons, said program storage device further including associating products and services for advertisement with a common activity performed by two or more persons at said location.

36. (Amended) The program storage device according to claim 32, wherein said collecting step further includes the steps of classifying obtained data according to predetermined criteria and generating classification data, said predetermined criteria selected from the group consisting of: a person's age, gender, area of residence, citizenship, physical characteristics, type of products involved in a current transaction, and prices of products involved in a current transaction.

39. (Amended) The program storage device according to Claim 38, wherein said method steps further includes the step of ranking suitable products/services for advertisement according to said common personal characteristics of said two or more persons, said selecting step selecting an optimized advertisement according to said ranking.

REMARKS

Reconsideration of the above-identified application, as amended, is respectfully requested.

In the Official Action dated November 2, 2001, the Examiner first rejected Claims 8-12, 23-27, and 36-40 under 35 U.S.C. §112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which

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applicant regards as the invention. Particularly, the Examiner alleges that Claims 8, 23 and 36 set forth an improper Markush group. Applicants respectfully amend these Claims 8, 23 and 36 to set forth the proper Markush group alternative language formulation in compliance with M.P.E.P. 2173.05(h)(I).

In the Official Action, the Examiner additionally rejected Claims 1-4, 7-10, 12, 13, 15-19, 22-25, 27-32, 35-38, 40 and 41 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,201,010 to Deaton et al. ("Deaton"). Claims 11, 26 and 39 were additionally rejected under 35 U.S.C. §103 as being unpatentable over Deaton in view of U.S. Patent No. 5,754,939 to Herz et al. ("Herz"). Claim 14 was further rejected under 35 U.S.C. §103 as being unpatentable over Deaton in view of Herz and in further view of U.S. Patent No. 5,970,469 to Scroggie et al. ("Scroggie"). Furthermore, the Examiner rejected Claims 5, 6, 20, 21, 33 and 34 under 35 U.S.C. §103 as being unpatentable over Deaton in view of U.S. Patent No. 56,149,056 to Stinson et al. ("Stinson").

As a preliminary matter, applicants hereby amend each of Claims 1-8, 11, 16-23, 26, 29-36 and 39 to set forth that the generation of advertisements according to the invention are optimized in accordance with physical or behavioral characterizations of two or more persons that happen to be at the public location at a given time.

With regard to the rejections of Claims 1-4, 7-10, 12, 13, 15-19, 22-25, 27-32, 35-38, 40 and 41 under 35 U.S.C. §102(b), applicants' respectfully disagree. Deaton is directed to a method and system for performing targeted marketing for individuals, e.g., in the form of a coupon, that may be generated and presented to a customer at a particular time such as at a point of sale in a store. Deaton particularly is directed to a transaction processing system used for developing customer profiles for storage in a local database which can be

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used for targeted marketing for that individual customer. That is, a customer profile is developed for each individual customer including data based on that customer's transaction history such as frequency of prior transactions and dollar volume (Deaton at col. 4, lines 6-9). Access to this customer profile information is initiated only at the point of sale terminal and based upon a customer identification verification such as provided as part of a check verification process or bar code reader (See Figure 2(a) of Deaton).

The present invention, as set forth in amended Claims 1, 16 and 29, is directed to a system and method for providing product and service advertisements that are optimized for two or more persons (i.e., collectively) at a public location. Thus, a first distinction over Deaton is that Deaton system is not and could not be used to generate an advertisement optimized for two or more persons (customers) at a time, but only for a single customer at a time.

The present invention, as set forth in amended Claims 1, 16 and 29 further obtains data relating to characteristics of the two or more persons at the public location during a period of time, extracts common elements from characteristics of the two or more persons from the collected data and, optimizes the type of product and service to be advertised based upon the common characteristic elements. The "characteristics" data as set forth in later claims may include physical characteristics of the two or more persons, wherein collected data relates to common physical characteristics of the two or more persons (Claim 5) or, behavioral characteristics of said one or more persons, wherein the collected data includes data relating to a common activity performed by the two or more persons at the location (Claim 7). While the Examiner indicates in the Office Action that a customer "purchasing" is a behavioral characteristic, this activity (purchasing) is necessarily required for Deaton as it is

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the only way a customer can be positively identified. In the present invention as described in the specification on page 20, lines 18-27, in contrast to Deaton, the behavior data characterizing the two or more persons in the present invention relates to a common activity performed by two or more persons which may form the basis of a group optimized advertisement, include activities such as smoking, drinking (by detecting images of people and analyzing objects that those people manipulate) driving cars, watching a movie or show, etc. and, is not necessarily used for positively identifying those persons. As described at page 12, line 5 et seq. in the present specification, and shown in Figure 1, physical and behavioral characteristics data is obtained by image detection means such as a video/camera systems that are located at the public locations and receive image data of the two or more customers at that location and communicate the image data to a server device for processing and optimized advertisement generating. As disclosed in the specification on page 12, lines 15-20, and set forth in amended Claims 1, 16 and 29 decisions regarding the generation of an advertisement are based on common elements of the physical or behavioral characteristics data obtained for the two or more persons. In contrast, the Deaton system simply identifies a customer at the point of sale location when conducting a point of sale transaction (e.g., a purchase) and looks up prior transaction history data from that customer's profile data (if developed) to form the basis for the coupon/advertisement to be targeted for that identified customer.

In further distinction over Deaton, as described by way of example in the specification on page 12, lines 15-20, the physical or behavioral characteristics data collected are not obtained at a point of sale terminal as required by the Deaton but may occur at any public location, e.g., a cosmetic section at a store. Thus, in the present invention, it is not a requirement that two or more individual customers be positively identified, rather, only that

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common characteristics of customers (e.g., based on age, hair color, smoking, etc.) need to be detected. Deaton does not teach or suggest this as Deaton's system is necessarily tied in with a check verification or bar code reader system which necessarily first requires the positive identification of the customer at the point of sale terminal in order access that customer's profile. An even further distinction as set forth in amended Claims 1, 16 and 29 is that the communication device located at the public location communicates the optimized advertisement to the two or more persons whose characteristic data was analyzed. In the present invention, the preferred communications devices include television monitors, digital display devices, a loud speaker device, an electronic billboard device, and the like, which render the optimized advertisement accessible by the two or more persons. In contrast, Deaton's system communicates the advertisement on paper in the form of a coupon that is presented only for that individual customer at the point of sale location.

In sum, Deaton does not teach nor suggest the generation of advertisements optimized in accordance with characterizations of two or more persons (e.g., a group) that happen to be at the public location at a given time.

For the reasons aforesaid, applicants respectfully request withdrawal of the subject rejection of independent Claims 1, 16 and 29 under 35 U.S.C. 102(b) and respectfully solicit allowance of these claims. By virtue of their dependence either directly or indirectly from Claims 1, 16 and 29, applicants respectfully solicit allowance of Claims 2-4, 7-10, 12, 13, 15, 17-19, 22-25, 27-28, 30-32, 35-38, 40 and 41.

With regard to the rejection of Claims 11, 26 and 39 under 35 U.S.C. §103 as being unpatentable over Deaton in view of Herz, applicants respectfully disagree. Herz teaches ranking only in the context of enabling an on-line search engine to provide a more

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focused search of relevant search items based on an individual user's target profile interest summary generated in Herz. In contrast, in the present invention as now set forth in amended Claims 11, 26 and 39, an optimizer element is provided that identifies the common behavioral or physical characteristics of two or more persons located at the public location that are strongly linked, e.g., smoking, drinking, and the optimizer would rank these characteristics accordingly for use when generating the optimized advertisement. The example provided in the present specification on page 22, lines 11-15 and on page 26, lines 7-9 discusses how characteristics ranking will be used to determine the ultimate advertisement displayed. Like Deaton, Herz is only targeted for a single user profile and would not be applicable for targeting advertisements for two or more persons.

In view of the foregoing, applicants respectfully request withdrawal of the subject rejection of Claims 11, 26 and 39 under 35 U.S.C. §103 and respectfully solicit allowance of these claims.

With regard to the Examiner's rejection of Claims 5, 6, 20, 21, 33 and 34 under 35 U.S.C. §103 as being unpatentable over Deaton in view of Stinson, it is respectfully submitted that use of biometric information obtained from two or more customers at a public location may be used for identification purposes to enable access to a database for those customers to determine common elements of characterizations associated with those customers stored in a database. In this manner, a group advertisement may be generated that is optimized in accordance with the common elements found based on the identifications of the two or more customers in the group. Thus, like Deaton, Stinson teaches an identification mechanism for a check caching application that serves only to identify a single customer and verify a purchase transaction, e.g., at a point of sale location. The present invention as

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claimed in Claims 5, 6, 20, 21, 33 and 34 is not so limited.

In view of the foregoing, applicants respectfully request withdrawal of the

subject rejection of Claims 5, 6, 20, 21, 33 and 34 under 35 U.S.C. §103 and respectfully

solicit allowance of these claims.

Attached hereto is a marked-up version of the changes made to the claims by

the current amendment.

In view of the foregoing remarks herein, it is respectfully submitted that this

application is in condition for allowance. Accordingly, it is respectfully requested that this

application be allowed and a Notice of Allowance be issued. If the Examiner believes that a

telephone conference with the Applicants' attorneys would be advantageous to the disposition

of this case, the Examiner is requested to telephone the undersigned.

Respectfully submitted,

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Serial No: 09/422,195   Docket: YOR919990321US1 (12837)

VERSION WITH MARKINGS TO SHOW CHANGES MADE:

IN THE CLAIMS:

Please amend Claims 1-8, 11, 16-23, 26, 29-36 and 39 as follows:

1. (Amended) A system for generating an advertisement optimized for [one] <u>two</u> or more persons located at a public location, said system comprising:

means for obtaining data relating to [one] <u>characteristics of said two</u> or more persons at a public location during a period of time;

processing means for receiving said obtained data, collecting data relating to said [one] <u>characteristics of said two</u> or more persons based on said received data, and extracting common elements <u>from characteristics of said two or more persons</u> from said collected data;

means for generating an advertisement related to products or services, said advertisement optimized according to said common elements for said [one] <u>two</u> or more persons at said location; and,

means communicable with said processing means for transmitting said optimized advertisement to a communication device located at said public location for communicating said optimized advertisement to said [one] <u>said two</u> or more persons.

2. (Amended) The system as claimed in Claim 1, further including database memory including data relating to: said [one] <u>two</u> or more said persons in said group, said persons data including identity data, data relating to a plurality of products and services, and advertisement data relating to various ones or categories of said products or services, said processing means collecting data by querying said database memory for identifying [one] <u>two</u> or more persons at said location.

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3. (Amended) The system as claimed in Claim 2, wherein said [one] two or more persons at said location perform a product purchasing transaction, said obtained data including products/services and corresponding process as chosen by said [one] two or more persons, said collected data including data relating to common products being purchased at the location.

4. (Amended) The system as claimed in Claim 3, wherein said collected data includes a history of prior products and service purchase transactions completed by said [one] two or more persons identified in said group.

5. (Amended) The system as claimed in Claim 2, wherein said means for obtaining data relating to [one] two or more persons includes means for obtaining data relating to physical characteristics of said [one] two or more persons, said collected data including data relating to common physical characteristics of persons at said location.

6. (Amended) The system as claimed in Claim 5, wherein said means for obtaining data relating to physical characteristics includes means for obtaining biometric data of said [one] two or more persons.

7. (Amended) The system as claimed in Claim 2, wherein said means for obtaining data relating to [one] two or more persons includes means for obtaining data relating to behavioral characteristics of said [one] two or more persons, said collected data including data relating to a common activity performed by [one] two or more persons at said location.

8. (Amended) The system according to claim 4, wherein said processing means further [comprising] comprises means for classifying obtained data according to predetermined criteria and generating classification data, said classifying means classifying data according to [one] two or more criteria selected from the group [comprising] consisting of: a person's age,

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gender, area of residence, citizenship, physical characteristics, type of products involved in a current transaction, and prices of products involved in a current transaction.

11. (Amended) The system according to Claim 10, wherein said processing means further includes:

means for associating products/services with said common personal characteristics <u>of said two or more persons</u>; and,

means for ranking suitable products/services for advertisement according to said common personal characteristics, said selecting means selecting an optimized advertisement according to said ranking.

16. (Amended) A method for generating an advertisement optimized for [one] <u>two</u> or more persons located at a public location, said method comprising the steps of:

a) obtaining data relating to [one] <u>characteristics of said two</u> or more persons at a public location during a period of time;

b) collecting data relating to said [one] <u>characteristics of said two</u> or more persons based on said obtained data;

c) extracting common elements <u>from characteristics of said two or more persons</u> from said collected data and associating products and services for advertisement with said common <u>characteristic</u> elements;

d) generating an advertisement related to products or services, said advertisement optimized according to said common <u>characteristic</u> elements for said [one] <u>two</u> or more persons at said location; and,

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e) transmitting said optimized advertisement to a communication device located at said public location for communicating said optimized advertisement to said [one] two or more persons.

17. (Amended) The method as claimed in Claim 16, further including the step of: storing data in a database memory, said data relating to: said [one] two or more said persons in said group, said persons data including identity data, data relating to a plurality of products and services, and advertisement data relating to various ones or categories of said products or services, said collecting data step b) including the step of querying said database memory for identifying [one] two or more persons at said location.

18. (Amended) The method as claimed in Claim 17, wherein said [one] two or more persons at said location perform a product purchasing transaction, said obtained data relating to products/services and corresponding process as chosen by said [one] two or more persons, wherein said collected data includes data relating to common products being purchased at the location.

19. (Amended) The method as claimed in Claim 18, wherein said collected data for each said [one] two or more persons includes a history of prior products and service purchase transactions completed by said [one] two or more persons identified in said group.

20. (Amended) The method as claimed in Claim 17, wherein said step of obtaining data relating to [one] two or more persons further includes obtaining data relating to physical characteristics of said [one] two or more persons, said method further including associating products and services for advertisement with said common physical characteristics of persons at said location.

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21. (Amended) The method as claimed in Claim 20, wherein said step of obtaining data includes obtaining biometric information data of said [one] two or more persons.

22. (Amended) The method as claimed in Claim 17, wherein said step of obtaining data further includes obtaining data relating to behavioral characteristics of said [one] two or more persons, said method further including associating products and services for advertisement with a common activity performed by [one] two or more persons at said location.

23. (Amended) The method according to claim 19, wherein said collecting step further includes the steps of classifying obtained data according to predetermined criteria and generating classification data, said predetermined criteria selected from the group [comprising] consisting of: a person's age, gender, area of residence, citizenship, physical characteristics, type of products involved in a current transaction, and prices of products involved in a current transaction.

26. (Amended) The method according to Claim 25, further including the step of ranking suitable products/services for advertisement according to said common personal characteristics of said two or more persons, said selecting step selecting an optimized advertisement according to said ranking.

29. (Amended) A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform method steps for generating an advertisement optimized for [one] two or more persons located at a public location, the method steps comprising:

a) obtaining data relating to [one] characteristics of said two or more persons at a public location during a period of time;

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b) collecting data relating to said [one] <u>characteristics of said two</u> or more persons based on said obtained data;

c) extracting common elements <u>from characteristics of said two or more persons</u> from said collected data and associating products and services for advertisement with said common <u>characteristic</u> elements;

d) generating an advertisement related to products or services, said advertisement optimized according to said common <u>characteristic</u> elements for said [one] <u>two</u> or more persons at said location; and,

e) transmitting said optimized advertisement to a communication device located at said public location for communicating said optimized advertisement to said [one] <u>two</u> or more persons.

30. (Amended) The program storage device as claimed in Claim 29, wherein the method steps further includes the step of: storing data in a database memory, said data relating to: said [one] <u>two</u> or more said persons in said group, said persons data including identity data, data relating to a plurality of products and services, and advertisement data relating to various ones or categories of said products or services, said collecting data step b) including the step of querying said database memory for identifying [one] <u>two</u> or more persons at said location.

31. (Amended) The program storage device as claimed in Claim 30, wherein said [one] <u>two</u> or more persons at said location perform a product purchasing transaction, said obtained data relating to products/services and corresponding process as chosen by said [one] <u>two</u> or more persons, wherein said collected data includes data relating to common products being purchased at the location.

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32. (Amended) The program storage device as claimed in Claim 31, wherein said data collected for each said [one] two or more persons includes a history of prior products and service purchase transactions completed by said [one] two or more persons identified in said group.

33. (Amended) The program storage device as claimed in Claim 30, wherein said step of obtaining data relating to [one] two or more persons further includes obtaining data relating to physical characteristics of said [one] two or more persons, said program storage device further including associating products and services for advertisement with said common physical characteristics of persons at said location.

34. (Amended) The program storage device as claimed in Claim 33, wherein said step of obtaining data includes obtaining biometric information data of said [one] two or more persons.

35. (Amended) The program storage device as claimed in Claim 30, wherein said step of obtaining data further includes obtaining data relating to behavioral characteristics of said [one] two or more persons, said program storage device further including associating products and services for advertisement with a common activity performed by [one] two or more persons at said location.

36. (Amended) The program storage device according to claim 32, wherein said collecting step further includes the steps of classifying obtained data according to predetermined criteria and generating classification data, said predetermined criteria selected from the group [comprising] consisting of: a person's age, gender, area of residence, citizenship, physical characteristics, type of products involved in a current transaction, and prices of products involved in a current transaction.

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39. (Amended) The program storage device according to Claim 38, wherein said method steps further includes the step of ranking suitable products/services for advertisement according to said common personal characteristics of said two or more persons, said selecting step selecting an optimized advertisement according to said ranking.

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